
THE IMPACT OF CORRUPTION ON NATIONAL COMPETITIVENESS

HERCIU Mihaela

Abstract:

The most uncorrupted nations are the most competitive nations. The corruption – a very important phenomenon – is the one who make a nation to try to be competitive. In the last years the Nordic Country's leading the top of competitiveness and the top of the uncorrupted nation. This article emphasizes the role of corruption in economic and social life with a strong impact on economic growth and competitiveness. The growth competitiveness index and the corruption perception index are the indicators who help us to calculate the correlation index between corruption and competitiveness.

Keywords: corruption, competitiveness, correlation, dispersion

JELL Classification: C16, F02, O57

Each country or region is unique with its own history and culture, its political system and by its own level of social and economic development it reached. There are huge differences from one country to another, and most of them are a result of the cultural differences. There can not be creating just one successful model which, applied to other countries, to succeed. We can say that a powerful masculine country, where the material values come first, as the USA, is a wealthy, competitive and less corrupt country as well; but, just the opposite, a powerful feminine country, where the spiritual values come first, like Sweden, could be just like that. Each country values the most one domain or another; instead, other countries pay no money on the same domain.

By these reasons, we **think that both the growth competitiveness index and the corruption perception index** as well must be balanced with different coefficients of importance, in accordance with the level of each country's economic development, first of all, and the competitive advance of the nation, secondly.

The model that Porter developed in 2003, says that we can identify three stages of economic competitiveness: the factor driven economy – where basic factor conditions such as low cost labor and easy access to natural resources are the

dominant sources of the competitive advantage; the investment driven economy – where competitiveness is a result of the ability to produce goods and services of quality, by efficient methods, but with lower salaries; the innovation driven economy – where the competitive advantage is given by the ability to produce innovative products and services at international level.

General framework

Competitiveness and Corruption are two real challenges for the mankind. The theoretical approaches of those concepts did not get to a unanimous and happy end and the real figures that evaluate them are not pleasingly at all for Romania. Our country registers bad positions into the world hierarchies regarding competitiveness and corruption.

The “wholeness” described above is an important characteristic of competitiveness. Competence is the other. Nations and enterprises are in the “business” of managing a set of competencies and skills to reach prosperity for one and profit for the other. The combination of both concepts leads to the following condensed definition of competitiveness: *Competitiveness analyses how nations and enterprises manage the totality of their competencies to achieve prosperity or profit* (See Garelli, S., *Competitiveness of Nations: The Fundamentals*, 2006).

The literature on competitiveness supplies a wide variety of definitions of the term. The National Competitiveness Council has chosen a definition that is at once simple to understand, while simultaneously incorporating those key elements which combine to produce a competitive economy: *“Competitiveness is the ability to achieve success in markets leading to better standards of living for all. It stems from a number of factors, notably firm level competitiveness and a supportive business environment that encourages innovation and investment, which combined lead to strong productivity growth, real income gains and sustainable development”* (See *Annual Competitiveness Report*, 2003).

Why do nations compete?

Nations compete because world markets are open. Why did nations finally agree to lower their barriers, at least for economic reasons?

Competitiveness is not a zero-sum game between countries. All countries can get more competitive because all countries can become more productive. There's not a fixed pool of demand in the world that countries are competing to serve. There is almost an unlimited amount human needs for health care, for goods, for services, for entertainment. (Michael Porter 2005).

The GCI (Growth Competitiveness Index) brings together a number of complementary concepts aimed at providing a quantified framework for measuring competitiveness. In formulating the range of factors that go into explaining the evolution of growth in country, it identifies “three pillars”: the quality of macroeconomic environment, the state country's public institutions, and the level of technological readiness (See *Global Competitiveness Report 2005-2006*, World Economic Forum).

Corruption has been brought throughout the last decade to an important position in the development and political economy literature. It has been seen as a primary impediment to growth with dramatic consequences in the developing world.

Corruption is generally *viewed as one of the main obstacles to the growth and development of low-income countries*, yet there has been relatively little theoretical analysis and a particularly scant amount of empirical analysis of such a widespread and perplexing problem, particularly concerning the consequences of corruption. The lack of extensive, objective and reliable data certainly accounts for the latter, but there is still much insight to be gleaned from models of the impacts and effects of corrupt governments on the economies they control (See Emerson, P., *Corruption, Competition and Democracy*, 2006).

Some studies have found that **corruption is lower in countries that are more open to foreign trade**; countries with protestant traditions and that were formerly British colonies; countries with longer exposure to democracy; countries that are more democratic; countries with greater political stability and greater freedom of the press; and countries with parliamentary systems (See Clarke, G., Xu Colin, L., *Ownership, competition and corruption. Bribe takers versus bribe payers*, 2002).

The TI Global Corruption Barometer provides a snapshot of the perceptions and experiences of citizens from around the world with regard to corruption in their countries. This year's findings again reflect the general public's mistrust in their national political and justice systems, with political parties, parliaments, the police and the judiciary perceived to be the sectors most affected by corruption.

Political parties were given the worst overall score, and were seen as the most corrupt sector in 45 out of 69 countries. This result reflects a worsening of the global opinion of political parties, as last year 36 out of a total 62 countries rated their parties as the most corrupt institution. Parliaments received a similarly negative score, indicating widespread concern about the effects of corruption on political systems. The results at the regional level are slightly different. While citizens in Asia, Western Europe, and Latin America pinpoint their political parties and parliaments as the most corrupt, the public in Africa is most concerned about the integrity of their police forces, and citizens in Central and Eastern Europe regard the police and their party system as equally corrupt.

In terms of the impact of corruption on different spheres of life, respondents clearly stated that the political spheres in their countries are affected by corruption. However, a high percentage of people also thought that the business sector was similarly affected. This was particularly the case for citizens in Africa and Western Europe.

Conversely, fewer people in Latin America had this opinion. While a smaller number thought their personal lives were directly affected by corruption, citizens from a few countries indicated very strongly that their lives were negatively influenced. In addition, respondents with low incomes tend to have more negative views of the effect that corruption has on their personal lives compared to middle income and high income respondents (Global Corruption Barometer 2005, Transparency International).

After Kaufmann and Vicente, three different equilibria are found characterizing a given country:

1. **3rd world** – high inequality / low income implying Illegal Corruption and the initiation of insurrections;
2. **2nd and much of the 1st world** – if accountability (which can be represented by the price of legal barriers) is low (it is about accountability as the people awareness of corruptible behavior by the elite), Legal Corruption arises.
3. **Nordics** – if accountability is high, no corruption emerges, not even Legal Corruption may arise

Daniel Kaufmann (2004) said that **ethics and corruption represents a challenge not only for many emerging economies**, but also for many countries of the rich world. The rich countries represent key determinants of country's competitiveness, shaping its investment climate.

Instead, the complex reality is one where many powerful firms play a role in shaping laws and policies of the state and the business environment itself.

The evidence suggests strongly that governance and corruption continues to be a major constraint to development, to the investment climate, and to competitiveness in much of the emerging world.

The 2004 **Executive Opinion Survey** evaluates the views of business leaders on environmental and social responsibility issues, and demonstrates both the importance of governmental leadership in providing an effective regulatory climate, and the key role of business leadership in addressing environmental and social issues proactively.

It is difficult to overstate the economic and social significance of corruption. The economist's natural approach to corruption control is to appeal to the concept of competition prevails. Susan Rose-Ackerman first suggest that the way to reduce corruption was to introduce competition at the level of the official receiving bribes: when a bureaucrat dispenses a scarce benefit, the existence of competing officials to reapply in case of being asked a bribe will down the equilibrium amount of corruption (See Ades, A., Di Tella, R., Rents, Competition, and Corruption).

The correlation between competitiveness and corruption

In this context, we ask if the competitive countries are the most non-corrupted country. We want to calculate a correlation index (CORREL) that analyzed the impact of the corruption on the national competitiveness. All that because Michael Porter said that a country how improves the Corruption Perception Index – decreases the corruption – can gain up to 20 of places in the global competitiveness top.

If we take a look at the answers to the question: "Have you or anyone close to you offer bribe of any kind in the last 12 month?", they vary considerably from one country to the other. So, into the **11%-30% group** there are Lithuania, Romania, Czech Republic, Greece; into the 5%-10% there are Bulgaria, Luxemburg, Poland, Turkey; into under 5% group there are Austria, Denmark, Spain, Finland, France, Germany, Ireland , Holland, Portugal, Great Britain (Source: Transparency International, Global

Barometer on Corruption, 2005). The question reveals, once again, the importance of the briber into the mechanism of corruption and into the corruption perception index results (Annex 1).

The correlation index:

$$C_{y/x} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{[n \sum x^2 - (\sum x)^2] * [n \sum y^2 - (\sum y)^2]}}$$

The correlation between corruption and competitiveness	
Correl 2005	0,92348273
Correl 2004	0,920930915
Correl 2003	0,916455876

The correlation between corruption and competitiveness is very strong and intense which means that the corruption have a very big impact of the national competitiveness.

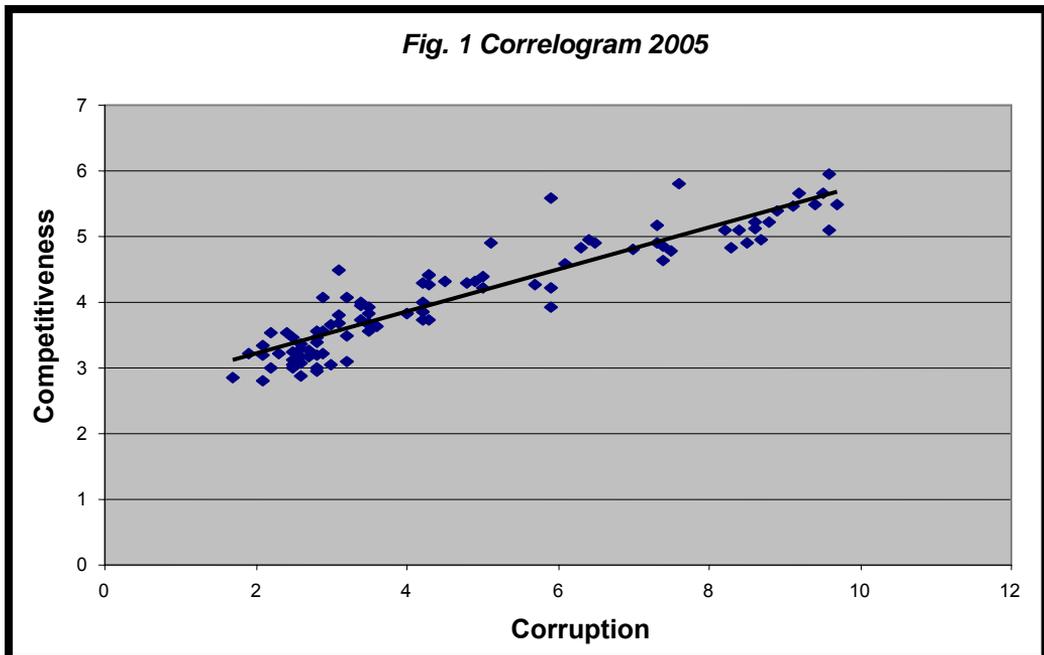


Fig. 2 Correlogram 2004

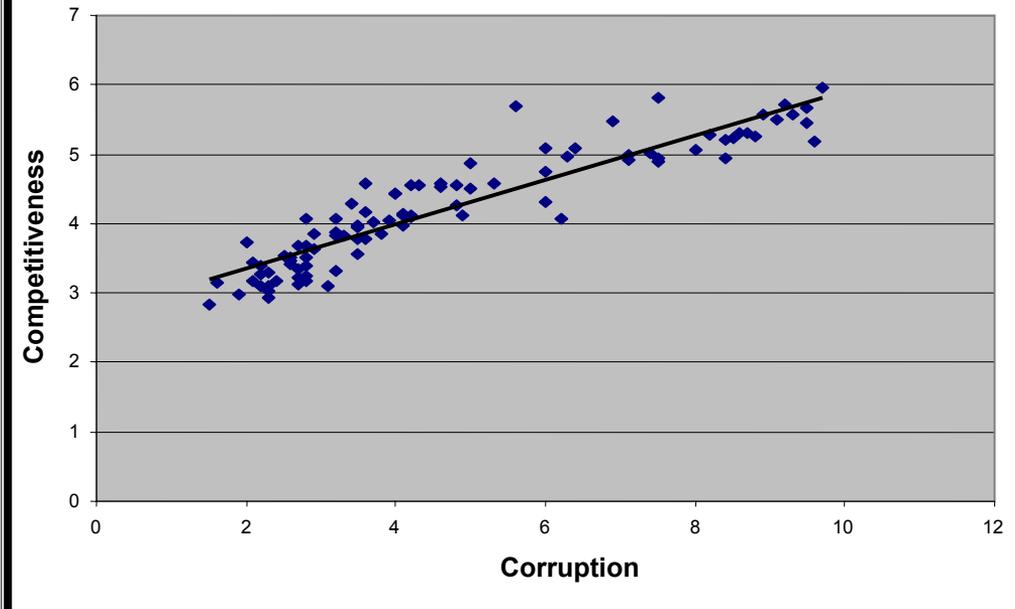
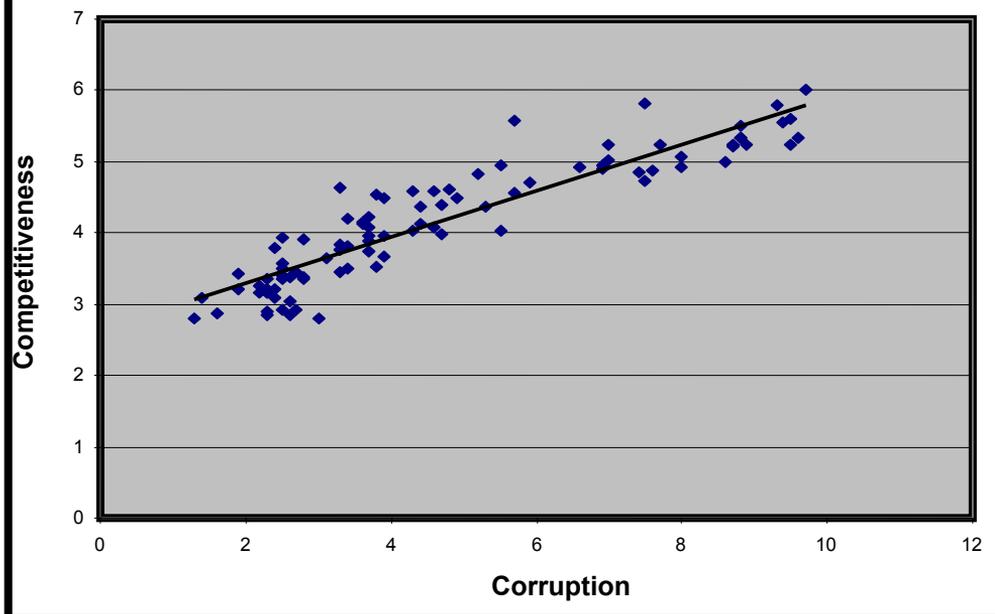


Fig. 3 Correlogram 2003



We analyze 94 countries for identifying the concentration of the score country from the top 94.

2005	CPI>9	8<CPI<9	7<CPI<8	6<CPI<7	5<CPI<6
GCI >5	7	6	2	0	1
4<GCI <5	-	3	5	4	5
3<GCI <4	-	-	-	-	1
GCI <3	-	-	-	-	-
Total	7	9	7	4	7

2005	4<CPI<5	3<CPI<4	2<CPI<3	1<CPI<2	Total
GCI >5	0	0	0	0	16
4<GCI <5	8	3	1	-	29
3<GCI <4	5	14	24	1	45
GCI <3	-	-	3	1	4
Total	13	17	28	2	94

We can notice that the corruption perception index has a major impact on national competitiveness. That results from the corrol index calculation which shows a very intense and direct connection between variables – corruption and competitiveness. Also, we can asserted, that in the 3-4 points interval for competitiveness are many countries (about half) and from these more than half (24 countries) have a corruption perception index very low, between 2 and 3 points. We want to calculate the means for both indicators.

Means for GCI

	2005	2004	2003
General Average	4,10	4,24	4,17
Geomean	4,02	4,16	4,08
Harmean	3,94	4,08	4,00
Median	3,95	4,12	4,07

Means for CPI

	2005	2004	2003
General Average	4,27	4,23	4,23
Geomean	3,78	3,72	3,69
Harmean	3,40	3,33	3,24
Median	3,20	3,40	3,40

Nr.	Average	2005		2004		2003	
		GCI Score	CPI	GCI Score	CPI	GCI Score	CPI
1	Europe	4,61	6,23	4,72	6,16	4,66	6,10
2	Asia	4,24	4,48	4,34	4,41	4,28	4,42
3	LAC	3,55	3,49	3,74	3,57	3,66	3,52
4	Africa	3,48	3,21	3,62	3,20	3,51	3,11
5	North America	5,46	8,00	5,53	8,00	5,51	8,10
6	Australia and New Zealand	5,15	9,20	5,22	9,20	5,28	9,15

On the strength of the results we can find some aberrance comparing the general average (on whole classification) with the averages on continents and groups of countries.

In 2005 general average of **growth competitiveness index** was 4.10.

Against this average, Europe's average has registered little relative aberrance of 0, 51 points and much smaller against Asia. The other continents or groups countries registered big aberrances comparative with general average. **Favorable aberrance** haw, expectedly, North America, Australia and New Zealand with average over 5. In change, Africa and Latin Countries haw negative aberrance under general average.

Corruption perception index haw in 2005 an general average of 4,27. From this average is closer Asia, the other groups of countries haw favorable and negative aberrances in report with general average (North America, Australia, New Zealand, Europe – favorable aberrance, on aside, Africa and Latin Countries, negative aberrance, on the other side).

In this context, we can determinate the dispersions for identify the dispersal area.

$$\sigma^2 = [\sum(X_i - X_m)] / n$$

where,

σ^2 – dispersion

X_i – variable value

X_m – variable average

N – number of indicators calculated

Nr. Crt.	Average	GCI Score	$Y_i - Y_m$	CPI	$X_i - X_m$	$(Y_i - Y_m)^2$	$(X_i - X_m)^2$
			Abaterea		Abaterea		
1	Europa	4,61	0,47	6,23	1,96	0,22	3,85
2	Asia	4,24	0,10	4,48	0,21	0,01	0,04
3	LAC	3,55	-0,59	3,49	-0,78	0,35	0,61
4	Africa	3,48	-0,66	3,21	-1,06	0,44	1,12
5	North America	5,46	1,32	8,00	3,73	1,73	13,91
6	Australia and New Zealand	5,15	1,01	9,20	4,93	1,02	24,30
	Total					3,76	43,84

Competitiveness dispersion	0,63
Corruption dispersion	7,31
Root deviation of competitiveness	0,791263
Root deviation of corruption	2,703223

Variation interval for the growth competitiveness index is (4,10 – 0,79 , 4,10 + 0,79), meaning (3,31 , 4,89)

Variation interval for the growth competitiveness index is (4,27 – 2,70 , 4,27 + 2,70), meaning (1,57 , 6,97)

Fig. 4. GCI - Average 2005

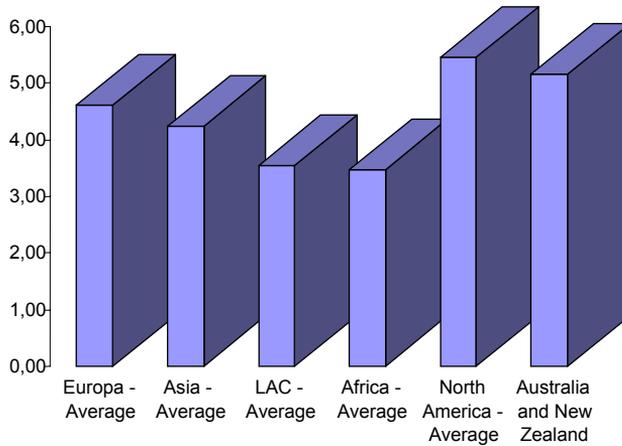
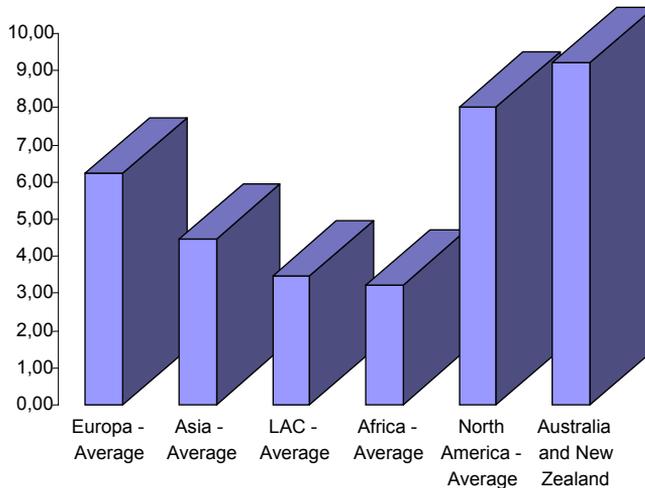


Fig. 5 CPI - Average 2005



International competition is intensifying, and Europe faces a twin challenge from Asia and the US. The potential rapid growth of the Chinese economy will create not only a new competitor to Europe, but also a vast and growing market. For Europe to take advantage of the opportunity, it needs to have an appropriate economic base, recognizing that over the decades ahead competition in manufacturing goods at home and abroad, especially those with a high wage content and stable technologies, is going to be formidable.

Indeed China, industrializing with a large and growing stock of foreign direct investment together with its own scientific base, has begun to compete not only in low but also in high value-added goods. Although Chinese wages are a fraction of those in

Europe, it is clear that the difference in quality of goods produced in China or the EU is already small or non-existent.

India's challenge is no less real — notably in the service sector where it is the single biggest beneficiary of the “offshoring” or ‘outsourcing’ of service sector functions with an enormous pool of educated, cheap, English-speaking workers. Asia's collective presence in the world trading system is going to become more marked.

Europe has to develop its own area of specialisms, excellence and comparative advantage which inevitably must lie in a commitment to the knowledge economy in its widest sense — but here it is confronted by the dominance of the US. The US threatens to consolidate its leadership.

The US accounts for 74 % of top 300 IT companies and 46 % of top 300 firms ranked by R & D spending. The EU's world share of exports of high-tech products is lower than that of the US; the share of high-tech manufacturing in total value added and numbers employed in high-tech manufacturing are also lower. In a global economy, Europe has no option but radically to improve its knowledge economy and underlying economic performance if it is to respond to the challenges (See Wim Kok, The Lisbon strategy for growth and employment. Facing the challenge, 2004)

Conclusions

According to the Doing Business Report edited from World Bank, in the future, rich countries are getting even better.

The “competitiveness pyramid” – create by the National Competitiveness Council – shown below provides a framework for understanding the drivers of national competitiveness. It distinguishes between the “inputs” into competitiveness and “outputs” of competitiveness. The structure of this year's ACR is based around this framework.

The **inputs** (in the bottom row of the competitiveness pyramid) represent the foundation stones of the economy and are the primary drivers of competitiveness. The Council believes that it is within these particular areas that policymakers can have the greatest impact on competitiveness. The input areas identified in the pyramid are: business and Work Environment; Economic and Technological Infrastructure; Education and Skills; Entrepreneurship and Enterprise Development; Innovation and Creativity;

The second stage of the competitiveness pyramid is the “**intermediate**” stage, lying between the input and output stages. Building competitiveness in the intermediate area (moving up the pyramid) allows for strong economic stability, as productivity is maximized in parallel with increases in real wages. This area, whilst measurable, is neither a complete input nor output area.

Following on from the intermediate stage, a range of national performance indicators are then examined to provide an overall macroeconomic view of Irish competitiveness.

These indicators are defined as **output** indicators and are not directly within the control of policymakers. Ireland's performance in these areas is directly related to the quality of previous policies instituted at the input level and the ability to build a strong intermediate stage of competitiveness. Competitive gains at the lower levels of the pyramid allow growth potential to be maximized at the apex, whilst providing suitable conditions for sustainable development.

Separation of **input and output indicators** means that indicators are no longer grouped entirely round policy areas. In the area of housing, for example, indicators are listed in both input and output sections. Input indicators for the supply and demand for housing are covered in the housing and environmental section of the infrastructural input area to competitiveness. **House price** data is featured in the intermediates area, whilst house price affordability is covered in the sustainability section of the outputs from competitiveness (See Annual Competitiveness Report).

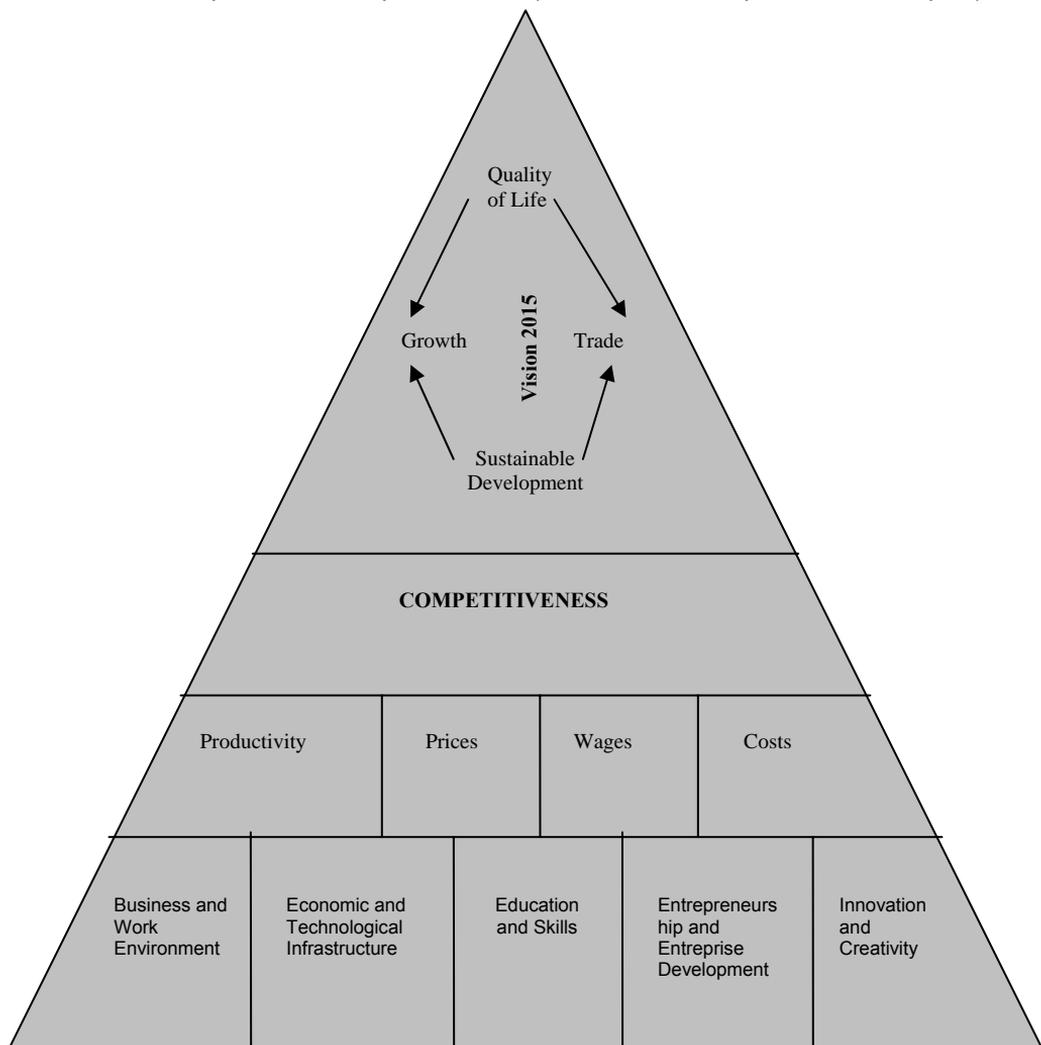


Fig. 6 National Competitiveness Framework Model

The analysis indicates that the amount of corruption is negatively linked to the level of investment and economic growth, that is to say, the more corruption, the less investment and the less economic growth. Analysis further shows that if the corruption index improves by one standard deviation (equal to 2.38 in this case – a standard deviation measures variation from the “normal” index), the investment rate increases by more than 4 percentage points and the annual growth rate of per capita GDP increases by over a half percentage point. In effect, a country that improves its standing on the corruption index from, say, 6 to 8 (recall that 0 is most corrupt, 10 least), will enjoy the benefits of an increase of 4 percentage points of investment, with consequent improvement in employment and economic growth (See Mauro Paolo, *Why Worry About Corruption*, Economic Issues 6, IMF, 1997).

In conclusion, corruption has often been argued to exist because the lack of competition. Rose-Ackerman (1996) maintained that “***In general any reform that increases the competitiveness of the economy helps reduce corrupt incentives.***” The impact of corruption goes far beyond the specific misbehavior of the actors involved. Its repercussions sweep across entire populations. A one million euro bribe can rapidly amount to a one hundred million euro loss in a poor country – through derailed development plans and incoherent investment decisions. In the future, is important to make a new correlation between organized and competitive corruption. In this framework, can be identify two direction: when ***corruption decisions are centralized*** (organized corruption) corruption is lower and bribes are higher than when corruption decisions are decentralized (competitive corruption and competitive nation); when ***corruption decisions are centralized***, the constituency’s activity levels are ***higher*** than when ***corruption decisions are decentralized***.

References:

- ❖ Ades, A., Di Tella, R., *Rents, Competition, and Corruption*;
- ❖ Celentani, M., Ganuza, J.J., *Organized versus Competitive Corruption*, 2001;
- ❖ Kaufmann Daniel, Pedro Vicente, *Legal Corruption*, Second Draft, October, 2005;
- ❖ Clarke, G., Xu Colin, L., *Ownership, competition and corruption. Bribe takers versus bribe payers*, 2002, Policy Research Working Paper 2783, World Bank;
- ❖ Emerson, P., *Corruption, Competition and Democracy*, 2006 and Western Economic Association International annual conference 2002;
- ❖ Garelli, S., *Competitiveness of Nations: The Fundamentals*, 2006, IMD World Competitiveness Yearbook;
- ❖ Gurria, A., *The OECD Fight Corruption*, 2006;
- ❖ Mauro Paolo, *Why Worry About Corruption*, Economic Issues 6, IMF, Washington, 1997;
- ❖ Wim Kok. *The Lisbon strategy for growth and Employment, Facing the challenge*, Report from the High Level Group, November 2004;
- ❖ National Competitiveness Council *Annual Competitiveness Report 2003*;
- ❖ Transparency International, *Global Corruption Report*, 2003-2005
- ❖ World Economic Forum, *Global Competitiveness Report*, 2003-2005

	Competitiveness	2005	2005	2004	2004	2003	2003
Nr. Crt.	Country	GCI Score	CPI	GCI Score	CPI	GCI Score	CPI
1	Finland	5,94	9,6	5,95	9,7	6,01	9,7
2	United States	5,81	7,6	5,82	7,5	5,81	7,5
3	Sweden	5,65	9,2	5,72	9,2	5,8	9,3
4	Denmark	5,65	9,5	5,66	9,5	5,61	9,5
5	Taiwan	5,58	5,9	5,69	5,6	5,58	5,7
6	Singapore	5,48	9,4	5,56	9,3	5,54	9,4
7	Iceland	5,48	9,7	5,44	9,5	5,34	9,6
8	Switzerland	5,46	9,1	5,49	9,1	5,51	8,8
9	Norway	5,4	8,9	5,56	8,9	5,33	8,8
10	Australia	5,21	8,8	5,25	8,8	5,33	8,8
11	Netherlands	5,21	8,6	5,3	8,7	5,24	8,9
12	Japan	5,18	7,3	5,48	6,9	5,25	7
13	United Kingdom	5,11	8,6	5,3	8,6	5,23	8,7
14	Canada	5,1	8,4	5,23	8,5	5,21	8,7
15	Germany	5,1	8,2	5,28	8,2	5,24	7,7
16	New Zealand	5,09	9,6	5,18	9,6	5,23	9,5
17	Estonia	4,95	6,4	5,08	6	4,96	5,5
18	Austria	4,95	8,7	5,2	8,4	5,07	8
19	Portugal	4,91	6,5	4,96	6,3	4,92	6,6
20	Chile	4,91	7,3	5,01	7,4	4,86	7,4
21	Malaysia	4,9	5,1	4,88	5	4,83	5,2
22	Luxemburg	4,9	8,5	4,95	8,4	4,99	8,6
23	Ireland	4,86	7,4	4,9	7,5	4,73	7,5
24	Israel	4,84	6,3	5,09	6,4	5,02	7
25	Hong Kong SAR	4,83	8,3	5,06	8	4,93	8
26	Spain	4,8	7	5	7,1	4,94	6,9
27	France	4,78	7,5	4,92	7,1	4,91	6,9
28	Belgium	4,63	7,4	4,95	7,5	4,88	7,6
29	Slovenia	4,59	6,1	4,75	6	4,7	5,9
30	Thailand	4,5	3,1	4,58	3,6	4,63	3,3
31	Czech Republic	4,42	4,3	4,55	4,2	4,48	3,9
32	Hungary	4,38	5	4,56	4,8	4,61	4,8

33	Tunisia	4,32	4,9	4,51	5	4,49	4,9
34	Slovak Republic	4,42	4,3	4,43	4	4,23	3,7
35	South Africa	4,31	4,5	4,53	4,6	4,37	4,4
36	Lithuania	4,3	4,8	4,57	4,6	4,39	4,7
37	Latvia	4,29	4,2	4,43	4	4,54	3,8
38	Jordan	4,28	5,7	4,58	5,3	4,58	4,6
39	Greece	4,26	4,3	4,56	4,3	4,58	4,3
40	Italy	4,21	5	4,27	4,8	4,38	5,3
41	Botswana	4,21	5,9	4,3	6	4,56	5,7
42	China	4,07	3,2	4,29	3,4	4,19	3,4
43	India	4,07	2,9	4,07	2,8	3,9	2,8
44	Poland	4	3,4	3,98	3,5	4,15	3,6
45	Mauritius	4	4,2	4,14	4,1	4,12	4,4
46	Egypt	3,96	3,4	3,88	3,2	3,84	3,3
47	Uruguay	3,93	5,9	4,08	6,2	4,03	5,5
48	Mexico	3,92	3,5	4,17	3,6	4,12	3,6
49	El Salvador	3,86	4,2	4,1	4,2	4,07	3,7
50	Colombia	3,84	4	3,84	3,8	3,74	3,7
51	Bulgaria	3,83	4	3,98	4,1	3,67	3,9
52	Ghana	3,82	3,5	3,78	3,6	3,46	3,3
53	Trinidad and Tobago	3,81	3,1	4,12	4,2	4,07	4,6
54	Croatia	3,74	3,4	3,94	3,5	3,97	3,7
55	Namibia	3,72	4,3	4,11	4,1	3,99	4,7
56	Costa Rica	3,72	4,2	4,12	4,9	4,02	4,3
57	Brazil	3,69	3,1	4,05	3,9	3,95	3,9
58	Turkey	3,68	3,5	3,82	3,2	3,65	3,1
59	Romania	3,67	3	3,86	2,9	3,38	2,8
60	Peru	3,66	3,5	3,78	3,5	3,88	3,7
61	Jamaica	3,64	3,6	3,82	3,3	3,52	3,8
62	Tanzania	3,57	2,9	3,38	2,8	3,49	2,5
63	Argentina	3,56	2,8	3,54	2,5	3,35	2,5
64	Panama	3,55	3,5	4,01	3,7	3,81	3,4
65	Indonesia	3,53	2,2	3,72	2	3,42	1,9
66	Russian Federation	3,53	2,4	3,68	2,8	3,46	2,7

67	Morocco	3,49	3,2	4,06	3,2	3,77	3,3
68	Philippines	3,47	2,5	3,51	2,6	3,58	2,5
69	Algeria	3,46	2,8	3,67	2,7	3,39	2,6
70	Serbia and Montenegro	3,38	2,8	3,23	2,7	3,36	2,3
71	Vietnam	3,37	2,6	3,47	2,6	3,8	2,4
72	Pakistan	3,33	2,1	3,17	2,1	3,41	2,5
73	Ukraine	3,3	2,6	3,27	2,2	3,17	2,3
74	Macedonia	3,26	2,7	3,34	2,7	3,22	2,3
75	Uganda	3,24	2,5	3,41	2,6	3,25	2,2
76	Nigeria	3,23	1,9	3,16	1,6	3,1	1,4
77	Venezuela	3,22	2,3	3,3	2,3	3,21	2,4
78	Mali	3,22	2,9	3,32	3,2	2,79	3
79	Mozambique	3,19	2,8	3,17	2,8	2,91	2,7
80	Kenya	3,19	2,1	3,45	2,1	3,21	1,9
81	Honduras	3,18	2,6	3,1	2,3	2,9	2,3
82	Gambia	3,18	2,7	3,52	2,8	3,93	2,5
83	Guatemala	3,12	2,5	3,38	2,2	3,1	2,4
84	Sril Lanka	3,1	3,2	3,57	3,5	3,51	3,4
85	Nicaragua	3,08	2,6	3,12	2,7	3,05	2,6
86	Bolivia	3,06	2,5	3,09	2,2	3,16	2,3
87	Dominican Republic	3,05	3	3,63	2,9	3,77	3,3
88	Ecuador	3,01	2,5	3,18	2,4	3,16	2,2
89	Malawi	3	2,8	3,24	2,8	3,36	2,8
90	Ethiopia	3	2,2	2,93	2,3	2,92	2,5
91	Madagascar	2,95	2,8	3,11	3,1	2,85	2,6
92	Zimbabwe	2,89	2,6	3,03	2,3	2,84	2,3
93	Bangladesh	2,86	1,7	2,84	1,5	2,79	1,3
94	Paraguay	2,8	2,1	2,99	1,9	2,87	1,6